

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number  
**WO 2005/091883 A2**

(51) International Patent Classification: Not classified

TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:  
PCT/US2005/006137

(22) International Filing Date: 24 February 2005 (24.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10/801,458 15 March 2004 (15.03.2004) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,

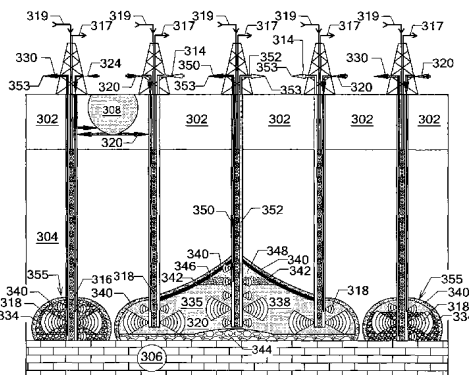
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT,

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(54) Title: EXTRACTING AND PROCESSING HYDROCARBON-BEARING FORMATIONS



(57) Abstract: A hydrocarbon bearing formation which is heated using a variable frequency automated capacitive radio frequency dielectric heating in situ process. Hydrocarbons or other substances natural to a hydrocarbonaceous formation may be produced by heating specific chemical compositions with or without the use of a carrier medium. Separation of desired hydrocarbons from less sought-after constituents can occur in carrier medium subterranean reservoir. Hydrocarbon media can be slurry heated using a variable frequency automated capacitive radio frequency dielectric heating method. Slurry heated hydrocarbon media can be ejected to lower depths of carrier medium reservoir to impart hydrostatic pressure onto media. Hydraulic pressure blasted at cavern wall with carrier medium fluid possessing variable frequency automated capacitive radio frequency dielectric heating properties will be used to enlarge cavern size. Explosives can be used to enlarge cavern outer perimeter. The rubble from the hydraulic digging and/or explosion(s) will deposit hydrocarbonaceous substances in cavern carrier medium reservoir for heating and extraction of desired hydrocarbons. Remote vessels can be used in cavern reservoir to direct heating frequencies, for hydraulic mining, and/or for recirculating carrier medium.

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- of inventorship (Rule 4.17(iv)) for US only

**Published:**

- without international search report and to be republished upon receipt of that report

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